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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,303	10/08/2003	Osamu Takagi	016887-1100	5483

22428 7590 09/27/2004

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EXAMINER	
LEUNG, PHILIP H	

ART UNIT	PAPER NUMBER
3742	

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/680,303	TAKAGI ET AL.	
	Examiner	Art Unit	
	Philip H Leung	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17,20-26,33 and 34* is/are pending in the application.

4a) Of the above claim(s) *1-17,20-26 and 30-33* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10-8-2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of Figures 11(a) and 11(b), claim 34, in the reply filed on 8-6-2004 is acknowledged.

2. Claims 1-17, 20-26 and 30-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as drawn to a nonelected species. Election was made **without** traverse in the reply filed on 8-6-2004.

3. The drawings filed 10-8-2003 are acceptable.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al (US 5,752,150) (cited by applicant), in view of Gantt (US 5,374,810) or Morita (JP 57-133607).

Kato shows in Figures 2 and 9-12, a fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil 3, 22, which is arranged so as to be close to an endless member 5 having a metal layer of a conductive material (see col. 11, lines 32-45), to cause said endless member to generate heat to heat a member to be fixed, wherein said coil has a plurality of unit wires 301-304 (Figures 16-18), each of which comprises a conductor coated with a first insulating coating (litz wires are individually insulated, col. 11, lines 9-12) and it also includes an insulating member 39 for covering the coil 22 and the holder to isolate the coil from the heating member 5 (see Figures 28-31 and col. 18, line 14 – col. 20, line 13). It states that the insulating member 39 may be a coating (col. 19, lines 9-14). Anyway, Gantt shows that it is well known in the art to use a coating on the insulated coil to form an induction coil winding (see Figures 1 and 2, the abstract and col. 5, lines 40-47). Morita shows that it is well known in the art of induction coil to provide a double coating on the coil conductor to prevent breakdown (see Figures 1-5 and the English abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kato to use a coating on the coil units as the insulating member to provide better insulation to prevent breakdown, in view of the teaching of Gantt or Morita.

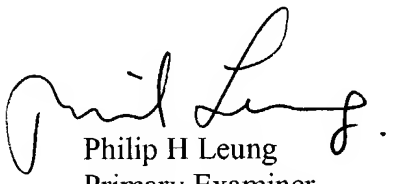
6. Claim 34 is further rejected under 35 U.S.C. 103(a) as being unpatentable over Hayasaki et al (US 5,819,150) (cited by the applicant), in view of Cornec et al (US 5,866,884) and Morita (JP 57-133607).

Hayasaki shows in Figures 2 and 9-12, "a fixing device using induction heating for causing alternating current to pass through an electromagnetic induction coil 4, which is arranged so as to be close to an endless member 1 having a metal layer 1a of a conductive material, to cause said endless member to generate heat to heat a member to be fixed, wherein said coil 4 has a plurality of unit wires 4a, 4b, each of which comprises a conductor coated with a first insulating coating (col. 8, lines 27-58)". Therefore it shows every feature and structure except for the use of a second insulating coating on the coil to doubly isolate said coil from said endless member. Cornec shows that it is well known in the art of induction heating coil assembly to form a coil winding with a multiple strand conductor of insulated wires and then position the winding between two electrically insulating sheets forming a laminated structure in order to provide better insulation between the coil and other components of the heating assembly (see Figures 1-3 and col. 3, line 24 – col. 4, line 65). Morita shows that it is well known in the art of induction coil to provide a double coating on the coil conductor to prevent breakdown (see Figures 1-5 and the English abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hayasaki to use another insulating coating on the coil winding to provide better insulation between the coil and the other heating elements of the image fixing device, in view of the teaching of Cornec and Morita.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H Leung whose telephone number is (703) 308-1710.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (703) 305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Philip H Leung
Primary Examiner
Art Unit 3742

P.Leung/pl
9-23-2004